

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FII	JING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/900,001	0	7/05/2001	Mark J. McArdle	002114.P021	5140
28875	7590	10/17/2005		EXAMINER	
Zilka-Kotab P.O. BOX 72	•		MOORTHY, ARAVIND K		
SAN JOSE, CA 95172-1120				ART UNIT PAPER NUMBE	
				2131	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		09/900,001	MCARDLE ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Aravind K. Moorthy	2131			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAINS ons of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Disperiod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 04 Au	ugust 2005.				
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1,2,4-14,16-26 and 28-42 is/are pendiday  4a) Of the above claim(s) is/are withdray  Claim(s) is/are allowed.  Claim(s) 1,2,4-14,16-26 and 28-42 is/are reject  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	ion Papers					
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on <u>05 July 2001</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examiner	☑ accepted or b)☐ objected to be drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority (	under 35 U.S.C. § 119					
12)[ a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage			
2) Notice 3) Information	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:				

Application/Control Number: 09/900,001 Page 2

Art Unit: 2131

#### **DETAILED ACTION**

1. This is in response to the amendment filed on 4 August 2005.

2. Claims 1, 2, 4-14, 16-26 and 28-42 are pending in the application.

3. Claims 1, 2, 4-14, 16-26 and 28-42 have been rejected.

4. Claims 3, 15 and 27 have been cancelled.

### Response to Arguments

5. Applicant's arguments with respect to claims 1, 2, 4-14, 16-26 and 28-39 have been considered but are most in view of the new ground(s) of rejection.

## Claim Objections

6. Claim 13 is objected to because of the following informalities: grammatical error. In the preamble of the claim, an extra "a" was added. The extra "a" needs to be removed. Appropriate correction is required.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 09/900,001

Art Unit: 2131

7. Claims 1, 2, 4-14, 16-26 and 28-42 are rejected under 35 U.S.C. 102(e) as being

anticipated by Annicchiarico et al U.S. Patent No. 6,247,148 B1.

As to claim 1, Annicchiarico et al discloses a computerized method to prevent identification of an operating system executing on a computer connected to a network comprising:

intercepting a portion of outgoing network data characteristic of the operating system [column 3, lines 40-46]; and

Page 3

masking the portion of outgoing network data to impersonate a different operating system in accordance with a security policy if the network is an untrusted network [column 4, lines 20-52];

wherein the masking the portion comprises:

replacing the portion of outgoing network data with data characteristic of the different operating system [column 4, lines 20-52].

As to claims 2, 14 and 26, Annicchiarico discloses discarding the portion of outgoing network data [column 4 line 53 to column 5 line 8].

As to claims 4 and 16, Annicchiarico discloses that the security policy identifies the portion of outgoing network data and specifies an action to take to mask the portion of outgoing network data [column 4, lines 20-52].

As to claims 5 and 17, Annicchiarico discloses that the security policy further specifies replacement data for the portion of outgoing network data [column 4, lines 20-52]. Annicchiarico discloses the replacement data characteristic of the different operating system [column 4, lines 20-52].

As to claims 6, 18 and 39, Annicchiarico discloses that the security policy further defines the network as untrusted [column 3, lines 40-46].

As to claims 7, 19 and 29, Annicchiarico discloses receiving the security policy through the network [column 3, lines 40-46].

As to claims 8, 20 and 30, Annicchiarico discloses modifying the security policy based on user input [column 3, lines 40-46].

As to claims 9, 21 and 28, Annicchiarico discloses transmitting the portion of outgoing network data unchanged if the network is a trusted network [column 5, lines 29-48].

As to claims 10, 22, 31, 37 and 38, Annicchiarico discloses the method further comprising:

intercepting a portion of incoming network data, as discussed above; and sending a false response to the portion of incoming network data to impersonate the different operating system in accordance with the security policy if the network is an untrusted network [column 5 line 63 to column 6 line 14].

As to claims 11 and 23, the Annicchiarico discloses that the security policy identifies the portion of incoming network data and the false response [column 5 line 63 to column 6 line 14].

As to claims 12, 24 and 32, Annicchiarico discloses that the method is integrated into a firewall that protects the computer [column 5 line 63 to column 6 line 14].

As to claim 13, Annicchiarico et al discloses a computer-readable medium having executable instructions to cause a computer to perform a method comprising:

intercepting a portion of outgoing network data characteristic of the operating system [column 3, lines 40-46]; and

Application/Control Number: 09/900,001

masking the portion of outgoing network data to impersonate a different operating system in accordance with a security policy if the network is an untrusted network [column 4, lines 20-52];

wherein masking the portion comprises:

replacing the portion of outgoing network data with data characteristic of the different operating system [column 4, lines 20-52].

As to claim 25, Annicchiarico et al discloses a computerized system comprising:

a processing unit [column 3, lines 25-39];

a memory coupled to the processing unit through a bus [column 3, lines 25-39];

a network interface coupled to the processing unit through the buss and further operable for coupling to a network [column 3, lines 25-39];

an operating system executed from the memory by the processing unit [column 4, lines 20-52]; and

a fingerprint masking process executed from the memory by the processing unit to intercept a portion of outgoing network data characteristic of the operating system when the network interface is coupled to the network [column 3, lines 40-46], and to mask the portion of outgoing network data to impersonate a different operating system in accordance with a security policy if the network is an untrusted network [column 4, lines 20-52];

wherein the fingerprint masking process further causes the processing unit to mask the portion by replacing the portion of outgoing network data with data characteristic of the different operating system [column 4, lines 20-52].

As to claim 33, Annicchiarico et al discloses that the computerized system is a firewall and the fingerprint masking process masks an operating system on a computer coupled to the firewall [column 5 line 63 to column 6 line 14].

As to claim 34, Annicchiarico et al discloses a computer-readable medium having stored thereon an OS fingerprint policy data structure comprising:

a data unit type field containing data representative of an identifier for a type of data unit, wherein information associated with the data unit is characteristic of an operating system [column 4, lines 20-52]; and

an action field containing data representative of an action to be taken to mask the information associated with the data unit identified by the data unit type field [column 4, lines 20-52];

wherein making the information comprises:

replacing the information with information characteristic of a different operating system [column 4, lines 20-52].

As to claim 35, Annicchiarico et al discloses the computer-readable medium further comprising:

a re-fingerprint field containing data representative of an identifier for a field type with the data unit type identified by the data unit type field, and further

containing re-fingerprint data that identifies replacement data for the field identified by the field type [column 5, lines 49-62].

As to claim 36, Annicchiarico et al discloses that the re-fingerprint data is selected from the group consisting of the replacement data and a location for the replacement data [column 5, lines 49-62].

As to claim 40, Annicchiarico et al discloses that the security policy contains data on a plurality of different operating systems for allowing the portion of outgoing network data to impersonate any one of the plurality of different operating systems [column 4, lines 20-52].

As to claim 41, Annicchiarico et al discloses that each of the different operating systems included in the plurality of different operating systems is assigned a specific untrusted network for masking the portion of outgoing data according to the untrusted network [column 4, lines 20-52].

As to claim 42, Annicchiarico et al discloses that the false response is sent if the operating system would normally not respond to the incoming network data [column 9, lines 41-63].

Application/Control Number: 09/900,001

Art Unit: 2131

Conclusion

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793.

The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy

October 12, 2005

SUPERVISORY PATENT EXAMINER

Page 8

TECHNOLOGY CENTER 2100